Amendments to the Claims

This Listing of the Claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1. (Withdrawn) A business method for identifying a compound as a candidate for pharmaceutical development, comprising the steps of: (a) administering a compound to one or more test animals; (b) obtaining the gene expression patterns induced by administration of the compound in organs from the test animals; and (c) identifying the function of the compound in vivo , wherein the identification of the function of the compound in vivo indicates whether the compound is a candidate for pharmaceutical development.

2. (Withdrawn) The method of claim 1, wherein the step of obtaining the gene expression pattern further comprises: comparing the gene expression patterns of the test animals to a control gene expression pattern.

3. (Withdrawn) The method of claim 1, wherein the identity of the compound is not known by the administrator.

4. (Withdrawn) The method of claim 1, wherein the function of the compound is not known by the administrator.

5. (Withdrawn) The method of claim 1, wherein the compound is a protein or a peptide.

6. (Withdrawn) The method of claim 1, wherein administration is the direct administration of the compound.

7. (Withdrawn) The method of claim 1, wherein administration is the indirect administration of the compound.

8. (Withdrawn) The method of claim 1, wherein the test animals are selected from the group consisting of mouse, rat and monkey.

9. (Withdrawn) The method of claim 1, wherein the test animals comprise either both mice and monkeys or both rats and monkeys.

10. (Withdrawn) The method of claim 1, wherein the obtaining of the gene expression pattern is by organism-wide gene expression profiling.

11. (Withdrawn) The method of claim 1, wherein the test animals are mice and wherein the gene expression patterns of at least twenty-five organs are obtained.

12. (Withdrawn) The method of claim 1, wherein the test animals are monkeys and wherein the gene expression patterns of at least 120 organs are obtained.

13. (Withdrawn) The method of claim 1, wherein the comparing of the gene expression patterns of the test animals comprises an analysis of multiple targets and indications.

14. (Withdrawn) The method of claim 1, wherein the comparing of the gene expression patterns of the test animals comprises integrating information from genomic databases.

15. (Withdrawn) The method of claim 1, wherein the identifying of the function of the compound comprises an initial step of excluding from further analysis those genes whose values are systematically in the lower expression ranges where the experimental noise is high

16. (Withdrawn and Currently Amended) The method of claim 1, wherein the identifying of the function of the compound comprises the step of selecting a threshold t-test p-value that identifies ~~1-87~~ genes with different values between treated and non- treated based on a two component error model.

17. (Withdrawn) A system for identifying a compound as a candidate for pharmaceutical development, comprising: (a) an apparatus for obtaining the gene expression patterns induced by administration of the compound in organs obtained from the test animals, the gene expression patterns being stored in digital format in a memory storage device; (b) a database comprising stored the gene expression patterns of animals (i) having the same or different predetermined genetic composition from said test animals and (ii) which have been exposed to either control conditions and/or treatment with compounds similar to the test compounds; (c) means for comparing the collected gene expression patterns with the stored gene expression patterns and determining the presence or absence of correlations; and (d) means for determining the function of the test compound on the basis of the presence or absence of the correlations, wherein the identification of the function of the compound in viva indicates whether the compound is a candidate for pharmaceutical development.

18. (Currently Amended) ~~Use of a polypeptide for the manufacture of~~ A method of manufacturing a medicament for use in the treatment of a disease associated with deregulated angiogenesis, wherein the method comprises the step of:

(1) providing a ~~the~~ polypeptide ~~is~~ selected from the group consisting of:

(a) fibroblast growth factor 23 (FGF-23) (SEQ ID NO: 1) or a fragment of FGF-23;

(b) a bioactive polypeptide having a percentage of identity of at least 95% with the amino acid sequence of any one of the polypeptides of (a); and

(c) a bioactive variant of any one of the polypeptides of (a) or ~~(b)~~ (b), and

(2) manufacturing a medicament comprising the polypeptide and a pharmaceutically acceptable carrier for use in the treatment of a disease associated with deregulated angiogenesis.

19. (Previously Presented) Use of a polypeptide according to claim 18, wherein the disease associated with deregulated angiogenesis is selected from the group consisting of: retinopathies, age-related macular degeneration, haemangioblastoma, haemangioma and tumors.

20. (Previously Presented) Use of a polypeptide according to claim 18, wherein the disease associated with deregulated angiogenesis is retinopathy.

21. (Previously Presented) Use of a polypeptide according to claim 18, wherein the disease associated with deregulated angiogenesis is a cell proliferative disorder.

22. (Previously Presented) Use of a polypeptide according to claim 21, wherein the cell proliferative disorder is selected from the group consisting of:

chronic or acute renal diseases, arteriosclerosis, atherosclerosis, psoriasis, endometriosis, diabetes, chronic asthma and cancer.

23. (Previously Presented) Use of a polypeptide according to claim 21, wherein the cell proliferative disorder is cancer.

24. (Previously Presented) Use of a polypeptide according to ~~any one of~~ claim 18, wherein the polypeptide is encoded by a nucleic acid which hybridizes under stringent conditions to SEQ ID NO: 3.

25. (Previously Presented) Use of a polypeptide according to claim 18, wherein the polypeptide comprises a C-terminal fragment of FGF-23.

26. (Previously Presented) Use of a polypeptide according to claim 25, wherein the polypeptide comprises at least 15 amino acids of the C-terminus of FGF-23.

27. (Previously Presented) Use of a polypeptide according to claim 25, wherein the polypeptide has an amino acid sequence of SEQ ID NO: 2.

28. (Previously Presented) Use of a polypeptide according to claim 25, wherein the polypeptide is encoded by a nucleic acid which hybridizes under stringent conditions to SEQ ID NO: 4.

29. (Withdrawn and Currently Amended) A method for the treatment of a disease associated with deregulated angiogenesis comprising administering an effective amount of a medicament comprising an effective amount of polypeptide to a mammal suffering from the disease, wherein the polypeptide is selected from the group consisting of:

(a) fibroblast growth factor 23 (FGF-23) (SEQ ID NO: 1) or a fragment of FGF-23;

(b) a bioactive polypeptide having a percentage of identity of at least 95% with the amino acid sequence of the polypeptides of (a); and

(c) bioactive variant of the polypeptides of (a) or ~~(b)~~ (b),

the medicament further comprising a pharmaceutically acceptable carrier.

30. (Previously Presented) A method according to claim 29, wherein the disease associated with deregulated angiogenesis is selected from the group of retinopathies, age-related macular degeneration, haemangioblastoma, haemangioma and tumors.

31. (Previously Presented) A method according to claim 29, wherein the disease associated with deregulated angiogenesis is retinopathy.

32. (Previously Presented) A method for the treatment of a cell proliferative disorder comprising administering an effective amount of a polypeptide as defined in any one of the groups (a), (b) or (c) of claim 29 to a mammal suffering from the disorder.

33. (Previously Presented) A method according to claim 32, wherein the cell proliferative disorder is selected from the group of chronic or acute renal diseases, arteriosclerosis, atherosclerosis, psoriasis, endometriosis, diabetes, chronic asthma and cancer.

34. (Previously Presented) A method according to claim 32, wherein the cell proliferative disorder is cancer.

35. (Previously Presented) The method for the treatment of a disease or disorder according to claim 29 in which the effective amount of the polypeptide is administered intravenously, intramuscularly, subcutaneously, orally or topically.

36. (Previously Presented) The method for the treatment of a disease or disorder according to claim 29, wherein the polypeptide is encoded by a nucleic acid which hybridizes under stringent conditions to SEQ ID NO: 3.

37. (Previously Presented) The method for the treatment of a disease or disorder according to claim 29, wherein the polypeptide comprises a C-terminal fragment of FGF-23.

38. (Previously Presented) The method for the treatment of a disease or disorder according to claim 37, wherein the polypeptide comprises at least 15 amino acids of the C- terminus of FGF-23.

39. (Previously Presented) The method for the treatment of a disease or disorder according to claim 37, wherein the polypeptide has an amino acid sequence of SEQ ID NO: 2.

40. (Previously Presented) The method for the treatment of a disease or disorder according to claim 37, wherein the polypeptide is encoded by a nucleic acid which hybridizes under stringent conditions to SEQ ID NO: 4.

41. (Previously Presented) A pharmaceutical composition for use in a disease associated with deregulated angiogenesis comprising a polypeptide as defined in claim 18, and a pharmaceutically-acceptable carrier.

42. (Previously Presented) A pharmaceutical composition for use in a cell proliferative disorder comprising a polypeptide as defined in claim 18, and a pharmaceutically-acceptable carrier.